## Core Principles of the Math-in-CTE Model

Principle	Processes			
A. Develop and sustain a community of practice.	Cohorts of CTE-math teacher teams are formed around specific occupational foci or CTE content (e.g. business, auto technology, health).			
	<ul> <li>Administrators/school districts/professional organizations provide structure and support to build and sustain communities of practice including:         <ul> <li>Regular professional development that brings the communities of practice together several times during the academic year.</li> <li>External "stimuli" to keep teachers focused on the math interventions.</li> <li>On-going support for CTE teachers for development and implementation of math-enhanced lessons.</li> </ul> </li> </ul>			
B. Begin with the CTE curriculum, not with	CTE-math teacher teams <i>interrogate the curriculum</i> to identify the math embedded in the CTE curriculum.			
the math curriculum.	CTE-math teacher teams create curriculum maps that identify the intersection of occupational content and math constructs/concepts.			
	CTE teachers use a scope and sequence to guide implementation of math-enhanced CTE lessons.			
C. Address the math in CTE as an essential workplace skill.	CTE-math teams generate math examples in which students solve authentic workplace problems.			
	CTE teachers introduce and reinforce math as a "tool" to use in the workplace.			
	CTE teachers bridge CTE and math vocabulary as they develop and teach the lessons.			
D. Maximize the math in CTE curricula.	CTE-math teacher teams continue to locate as much math as possible in the CTE curricula throughout the year.			
	CTE teachers build on students' prior math knowledge and skills.			
	CTE teachers capitalize on teachable moments that follow the math enhanced lessons.			
E. Support CTE teachers as "teachers of mathin-CTE," not as math teachers.	CTE teachers participate in professional development activities that enable them to teach the math as it occurs in their CTE content, a process that involves:  • helping CTE teachers learn more about the math concepts in their CTE curricula.  • helping CTE teachers learn math formulas and vocabulary.  • providing opportunities for CTE teachers to practice teaching the math in their curricula			